

RECLAIMABLE ANAEROBIC COMPOSTER (RAC) - LANCASTER LANDFILL

Los Angeles County Solid Waste Management Committee/
Integrated Waste Management Task Force

April 11, 2013

Objective

- To determine if the RAC anaerobic digester can be a viable alternative to conventional composting or landfilling of organic wastes.



RAC Goals

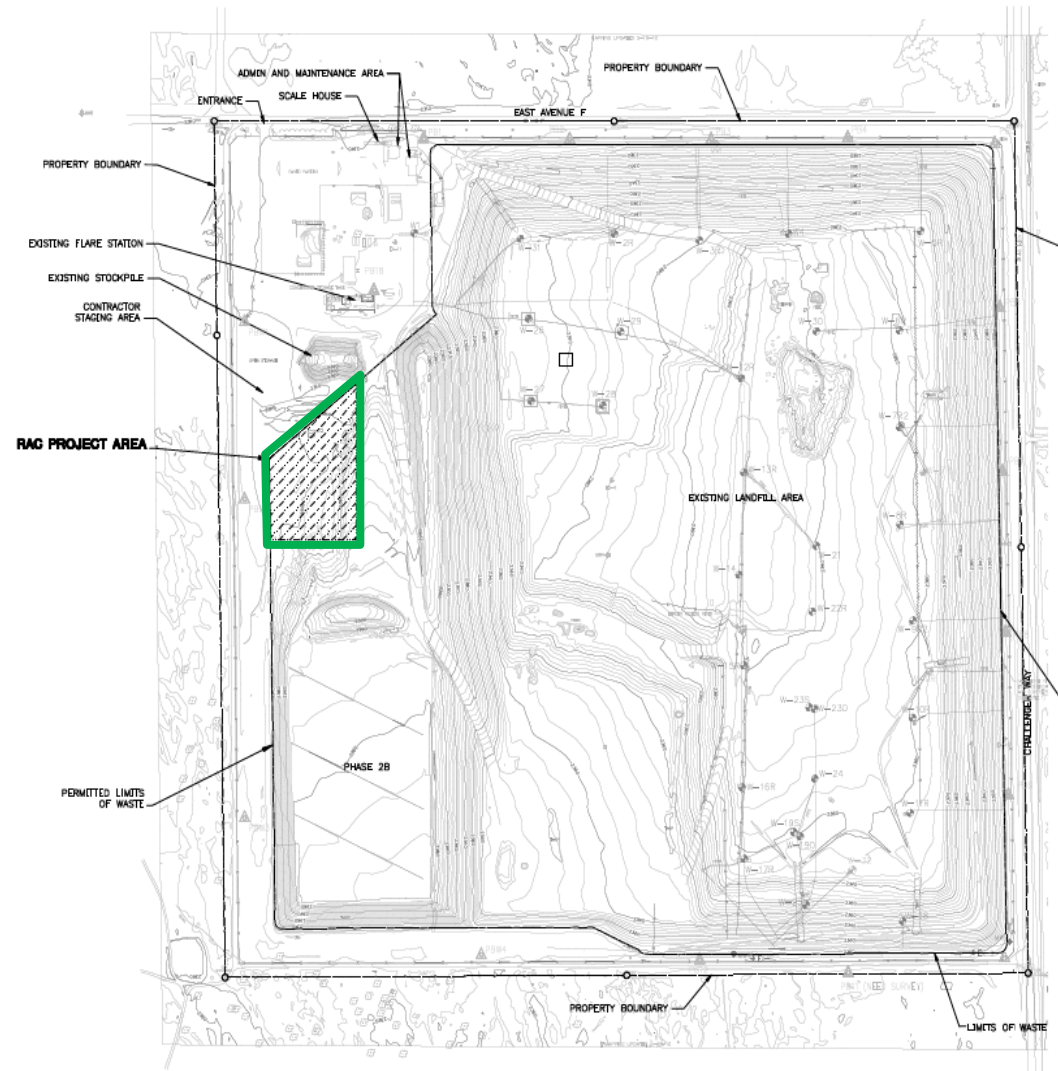


- Produce biomethane as Liquified or Compressed Natural Gas
- Produce biogas as an alternative fuel source or transformed to electrical energy
- Produce high-quality compost or soil amendments
- Investigate the feasibility of a full-scale operation

Area of Operation

□ Located in Western Area of the Landfill

□ ≈ 2.4 acres



Facility Information

- Hours of Operation

- ▣ Monday thru Saturday from 5 AM to 10 PM

- Consist of 6 pods

- ▣ 1,000 cubic yards/pod

- ▣ Maximum permitted: 5,000 cubic yards at any one time

- ▣ Within-vessel, maximum permitted: may exceed 5,000 cubic yards

Timeframe

- A minimum of a month to 9 mos./cycle for digestion
 - ▣ Digestion rate on variable feedstock
 - ▣ Climate influence in gas production
- Project duration - 4 years
 - ▣ Requires about 6 to 8 cycles to obtain sufficient data
 - ▣ Permitted to operate for 2 years. Option to extend operation for another 2 years.

Maintenance/Monitoring

- ❑ Load Checking
- ❑ Disposal of Materials Removed
- ❑ Placement of Organic Materials for the RAC
- ❑ Proper Employee Training
- ❑ Monitoring Requirements



Odor Mitigation

- ❑ Incoming loads are either appropriately sized, pre-shredded, or will require shredding
- ❑ Use of ground green waste or compost for cover
- ❑ Emissions/odor vacuum applied
- ❑ One to two hours of charging wastes
- ❑ Cells completely sealed final geomembrane cover
- ❑ Gas collection pipes to control odor from sealed cell
- ❑ Stationary/portable misting system
- ❑ Complaint Response and Odor Monitoring Protocol